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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/308,913	05/26/1999	Yakov I. Levin		6831

7590 06/02/2004  
Ilya Zborovsky  
6 Schoolhouse Way  
Dix Hills, NY 11746

EXAMINER

OROPEZA, FRANCES P

ART UNIT	PAPER NUMBER
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3762

DATE MAILED: 06/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/308,913

Applicant(s)

LEVIN, YAKOV I.

Examiner

Frances P. Oropeza

Art Unit

3762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 3/3/04 (Amendment and RCE).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 3-7 is/are pending in the application.
- 4a) Of the above claim(s) 5-7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3 and 4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Request for Continued Examination***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. The Applicant's submission filed on 3/3/04 has been entered.

### ***Petition to Revive***

2. A decision to grant the petition to revive this application was granted on 3/12/04.

### ***Restriction/Election***

3. Newly submitted claims 5-7 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

Independent claim 5 is a method of influencing the body comprising recording biopotentials using an electroencephalogram, the biopotentials divided into one second intervals, using harmonic analysis in the form of a Fourier expansion, determining a dimensionless generalized characteristic parameter for each special interval with respect to named power spectral densities (see claims for the formula associated with the ten categories), and using a numerical value representing each interval to create brain music used as music therapy. Independent claim 3 does not comprise the limitations of using an encephalogram or using the ten formulas of claim 5 as well as other limitations.

Independent claim 6 is a method of influencing the body comprising recording, using an electroencephalogram, the biopotentials divided into equal intervals, using harmonic analysis in the form of a Fourier expansion, isolating common frequency ranges; calculate a numerical interval representing a dimensionless generalized characteristic parameter for each special interval with respect to power spectral densities, and using a numerical value to determine appropriate parameters of musical sound to create brain music used as music therapy.

Independent claim 3 does not comprise the limitation of using an electroencephalogram divided into equal time intervals of claim 6 as well as other limitations.

Independent claim 7 is a method of influencing the body comprising registering biopotentials, transform the data to a control signal, forming signal of external sound effect, implementing the external sound effect as generation of musical sounds by parametric variation of tone, volume, and duration of the musical sounds in criterial dependence of variation of value of discrete current generalized parameter of transformed biosignal frequency spectrum, isolating intervals of identical duration, using harmonic analysis in the form of a Fourier expansion, determining a dimensionless generalized parameter for each interval, and forming a proportional range of musical sound parameters between a minimum and maximum diameters of the parameters, determining appropriate values of sound tone, volume and duration from each interval and transforming it to sound tone, volume and duration by a synthesizer into sound signals, and implementing the determination of the parameter by ratio of power spectral density of at least two characteristic frequency bands isolated in each spectral interval. Independent claim 3 does not comprise the limitations of using an encephalogram or using a synthesizer of claim 7 as well as other limitations.

Since the Applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 5-7 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

***Claim Rejections - 35 USC § 102***

4. Claims 3-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Saperston (US 5267942). Saperston discloses a method to influence physiological processes through physiological stimuli. The fundamental brain wave (EEG) of a patient is defined using a Fourier transform, and the tone by itself or in combination with music (col. 7 @ 56-68) is used to effectively influence the patient's physiological responses (col. 3 @ 31-34).

The Applicant's arguments filed 3/03/04 have been fully considered but they are not convincing. The Applicant asserts "the new features of the present invention which are now defined in the claims 3, 5 and 6 are not disclosed in the references and can not be derived as a matter of obviousness". The Examiner is confused by the Applicant's statement. The only pending independent claim, claim 3, was amended to correct minor 35 U.S.C. 112 issues, hence no new features have been added to the claimed present invention. The Applicant does not specifically identify limitations not disclosed by the prior art, hence the Examiner is unable to respond further to the arguments of missing features.

*Claim Rejections - 35 USC § 103*

5. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Monroe (US 5356368) in view of Saperston (US 5267942).

Monroe disclose a method for inducing desired states of consciousness, using an EEG waveform to create a binaural beat to treat a sleeping disorder (col. 2 @ 59-40).

Monroe discloses the claimed invention except for the use of a Fourier transform to optimize the isolation of the brain wave.

Saperston teaches signal processing using a Fourier transform for the purpose of defining fundamental brain waves that enable creation of a signal used to optimally influence the patient's physiological processes. It would have been obvious to one having ordinary skill in the art at the time of the invention to have used the Fourier transform to process the EEG signal in the Monroe system in order to gain a more precise representation of the fundamental brain wave to ensure the resulting customized signal used to influence the patient has optimal impact on the state of consciousness of the patient (col. 7 @ 56 - col. 8 @ 5).

The Applicant's arguments filed 3/03/04 have been fully considered but they are not convincing. The Applicant asserts "the new features of the present invention which are now defined in the claims 3, 5 and 6 are not disclosed in the references and can not be derived as a matter of obviousness". The Examiner is confused by the Applicant's statement. The only pending independent claim, claim 3, was amended to correct minor 35 U.S.C. 112 issues, hence no new features have been added to the claimed present invention. The Applicant does not

specifically identify limitations not disclosed by the prior art, hence the Examiner is unable to respond further to the arguments of missing features.

### *Specification*

6. As noted in prior actions, the specification references two figures, but the Examiner is unable to find the two figures in the application. This objection to missing figures was also noted in the previous office action (Paper No. 6) and the Applicant responded that the PCT drawings correspond to the drawings in the instant application and should be considered an integral part of the instant application. This response is not adequate. The Applicant is required to furnish drawing under 37 CFR 1.81. No new matter may be introduced in the required drawings. **The Applicant is required to submit drawings in reply to the Office action to avoid abandonment of the application.** The objection to the drawings will not be held in abeyance.

### *Claim Objections*

7. As previously suggested, to improve the readability of the claims, the following format is suggested:

-- 3. A method for influencing a body comprising the steps of:

registering physical parameter biopotentials;

transforming and processing the biopotentials to calculate a biosignal characteristic

generalized parameter;

transforming the biosignal characteristic generalized parameter on the basis of detected  
criterial correspondence into a control signal and forming an external sound effect;  
implementing ...--

### ***Abstract***

8. The abstract of the disclosure stands objected to because the abstract should be a concise statement of the technical disclosure and should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details. The Applicant has copied the independent claim virtually verbatim and has called it the abstract. A new abstract is needed which defines the invention in less complex terms. Appropriate correction is required.

### ***Statutory Basis***

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Fran Oropeza, telephone number is (703) 605-4355. The Examiner can normally be reached on Monday – Friday from 9 a.m. to 5 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Angela D. Sykes can be reached on (703) 308-5181. The fax phone number for the



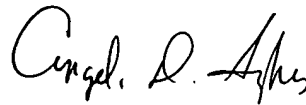
Art Unit: 3762

organization where this application or proceeding is assigned is (703) 872-9306 for regular communication and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Receptionist, telephone number is (703) 308-0858.

Frances P. Oropeza  
Patent Examiner  
Art Unit 3762

FPO  
5/23/04



ANGELA D. SYKES  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700